Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.- 67. (Canceled)

68. (New) An engine generator, for an engine comprising a flywheel configured so that a mass of rotatable magnets and adjacent magnetic material, wherein the magnetic material is sized to carry magnetic alternator flux, secure the magnets and provide magnetic flux distribution, and the magnetic material and magnets together provide the rotational inertia to constitute a unitary flywheel-alternator assembly for alternator power generation.

69. (New) The generator of Claim 68, wherein an inner portion of the flywheel is made from lightweight material and constitutes the only structural member connecting the rotatable magnets and associated magnetic material with a crankshaft of the engine.

70. (New) The generator of Claim 68, wherein the unitary flywheel-alternator assembly is the sole component driven by the engine.

71. (New) The generator of Claim 68, wherein the magnetic material is steel.

72. (New) The generator of Claim 68, wherein the magnetic material is one of A1S1 1215 steel and A1S1 1018 steel.

73. (New) The generator of Claim 68, wherein the flywheel is comprised of Samarium cobalt magnets, magnetic material, and an aluminum alloy.

74. (New) The generator of Claim 68, wherein the flywheel is comprised of Neodymium-iron-boron magnets, magnetic material, and an aluminum alloy.

75. (New) The generator of Claim 68, wherein the flywheel is comprised of Samarium cobalt magnets, magnetic material and a magnesium alloy.

76. (New) The generator of Claim 68, wherein the flywheel is comprised of Neodymium-iron-boron magnets, magnetic material, and a magnesium alloy.

77. (New) The generator of Claim 68, wherein said inner portion also functions as a cooling fan or blower to create the necessary air flow rate and air pressure rise necessary to force cooling air over selected areas of the engine, the selected engine areas comprising at least one of an oil reservoir, electronics, cylinder head, and engine block.

78. (New) The generator of Claim 68, wherein the engine is an internal combustion engine.

79. (New) The generator of Claim 77, wherein the cooling fan is selected from the group consisting of a centrifugal fan, an axial fan and a mixed-flow fan.

80. (New) The generator of Claim 77, wherein an engine cowling is provided to function as at least two of a fan shroud, a fan scroll, a distributor to cool the engine and the alternator, an electronic cold plate and one or more coolant ducts.

81. (New) The generator of Claim 80, wherein the distributor function of the engine cowling separates air flow to cool at least two of an engine head, cylinder wall of the engine, electrical components, and an oil sump.

82. (New) The generator of Claim 68, wherein the alternator is a permanent magnet alternator.

83. (New) The generator of Claim 68, wherein means is provided for converting alternating current produced by the alternator into direct current.

84. (New) The generator of Claim 80, wherein the alternator is a radial gap alternator.

85. (New) The generator of Claim 81, wherein the converting means comprises rectifiers.

86. (New) The generator of Claim 81, wherein the converting means comprise full-wave rectifiers.

87. (New) The generator of Claim 83, wherein the alternator is configured to produce three-phase power in parallel circuits.

88. (New) The generator of Claim 87, wherein an engine cowling is provided to function as at least two of a fan shroud, a fan scroll, a distributor to

cool the engine and the alternator, an electronic cold plate and one or more coolant ducts.

89. (New) The generator of Claim 88, wherein the converting means is arranged at the engine cowling.

90. (New) The generator of Claim 68, wherein a backpack mounting is provided for the engine and alternator.

91. (New) The generator of Claim 90, wherein the engine and alternator are configured to produce a power output of up to about 5 kW.

92. (New) An engine generator, comprising a flywheel configured so that a mass of rotatable magnets and adjacent magnetic material, wherein the magnetic material is sized to carry magnetic alternator flux and operatively mount the magnets, provide magnetic flux distribution and comprise a unitary flywheel-alternator fan assembly for alternator power generation, wherein an inner portion of the flywheel constitutes the only structural member connecting the rotatable magnets and associated magnetic material with the engine crankshaft, said inner portion also functions as a cooling fan or blower to create the necessary air flow rate and air pressure rise necessary to force cooling air over selected areas of the engine, wherein the cooling fan is selected from the group consisting of a centrifugal fan, an axial fan and a mixed-flow fan, an engine cowling is provided to function as at least two of a fan shroud, a fan scroll, a distributor to cool the engine and alternator, an electronic cold plate and one or more coolant ducts.

93. (New) The generator of Claim 92, wherein the distributor function of the engine cowling separates air flow to cool at least two of an engine head, cylinder wall of the engine, oil sump and electronics.

94. (New) The generator of Claim 92, wherein a fan shroud for the cooling fan is operatively associated with the engine cooling to force air through the engine cowling.

95. (New) The generator of Claim 92, wherein the cooling fan constitutes a mechanical link between the rotatable magnets and the adjacent magnetic material and a mounting portion of the flywheel.

96. (New) The generator of Claim 95, wherein a lightweight alloy in the cooling fan constitutes the mechanical link, and the magnetic material and magnets of the alternator's rotor provide the inertia component.

97. (New) The flywheel of Claim 92, wherein the alternator rotor, inertial material and fan or blower constitute a multi-piece construction of lightweight material, magnetic material, and magnets.

98. (New) The generator of Claim 97, wherein the lightweight alloy is one of magnesium or an aluminum alloy.

99. (New) An engine generator, comprising a flywheel composed of a mass of rotatable magnets and adjacent magnetic material, wherein the magnetic material is sized to provide the magnetic flux distribution, and the magnets and magnetic material provide rotational inertia of a unitary flywheel-alternator fan assembly for alternator power generation, wherein an inner

portion of the flywheel of the assembly constitutes the only structural member connecting the rotatable magnets and associated magnetic material with an engine crankshaft, said inner portion also functioning as a cooling fan or blower to create air flow rate and air pressure rise sized to force cooling air over selected engine areas.

100. (New) The generator of Claim 99, wherein the engine generator is configured to produce a power output of up to about 15 kW.